

PATENTKRAV

1. Vocal valve to be mounted to a tracheostomized person's neck comprising an air passage to be connected to the tracheostoma for connecting trachea with the surroundings, and a check valve member (20, 20', 20'', 32) in the air passage normally closed but allowing inhalation through the air passage **characterized by** a manually adjustable member (10, 29) for establishing a free air flow through the air passage at inhalation as well as exhalation.

2. Vocal valve according to claim 1 **characterized** in that a heat and moisture exchanging element (22, 35) is provided in the air passage.

3. Vocal valve according to claim 1 or 2 **characterized** in that the manually adjustable member comprises a housing (10, 29) enclosing the vocal valve member said housing being rotatably mounted to a bottom plate (16, 25) to be connected to the tracheostoma.

4. Vocal valve according to claims 2 and 3 **characterized** in that the interior of the housing (10, 29) through at least one opening (11, 31) in the wall of the housing communicates with the surroundings via the heat and moisture exchanging element (22, 35).

5. Vocal valve according to claim 4 **characterized** in that the heat and moisture exchanging element (22, 35) is detachably mounted to the housing (10, 29) on the outside thereof.

6. Vocal valve according to claim 4 or 5 **characterized** in that the check-valve member (10, 20', 20'', 32) is constructed to cover in the closed position thereof the opening (11, 31) and to block the air passage therethrough.

7. Vocal valve according to claim 6 **characterized** in that the check valve comprises an elastic membrane (20) which is constructed to keep the opening (11) uncovered in a relieved condition thereof.

8. Vocal valve according to claim 7 **characterized** in that a member (21) which is displaceable by rotating the housing (10) in relation to the elastic membrane (20) is constructed to keep the elastic membrane in a position covering the opening (11) in one rotated position of the housing, and to allow the relieved condition of the elastic membrane with the opening uncovered in another rotated position of the housing.

9. Vocal valve according to claim 6 **characterized** in that the check valve member comprises an elastic membrane (20') which is constructed to take a position in a relieved condition thereof wherein the opening (11) is covered.

10. Vocal valve according to claim 9 **characterized** in that a member (21') displaceable by rotation of the housing (10) in relation to the elastic membrane (20') is constructed to keep the elastic membrane in a position in which the opening (11) is uncovered, in one rotated position of the housing.

11. Vocal valve according to claim 8 or 10 **characterized** in that the displaceable member (21, 21') is mounted stationarily on the bottom plate and that the elastic membrane is located on the inside of the wall of the housing (10) to be rotatable together with the housing.

12. Vocal valve according to claim 6, **characterized** in that the opening (11, 31) can be adjusted to a position opposite to the check valve member (32) by rotating the housing (10, 29) the check valve member in said position controlling the air passage through the opening, and to another position wherein the opening is uncovered for free air passage therethrough.

13. Vocal valve according to claim 12 **characterized** in that a plurality of openings (31) are provided in an end wall of the housing (29) and that the check valve member (32) forms a corresponding number of flaps (33) dimensioned to cover each one of the openings and separated by spaces

the openings being adjustable by rotation of the housing to a position wherein the openings are opposite to the flaps, and another position wherein the openings are located in the spaces between the flaps.